MAY 2, 1966

CONTAINERIZATION—OFF THE GROUND, ONTO THE SHIP

AFRICAN COTTON MARKETS

THE BRITISH MARKET FOR U.S. DEHYDRATED ALFALFA

FOREIGN AGRICULTURE

Including FOREIGN CROPS AND MARKETS

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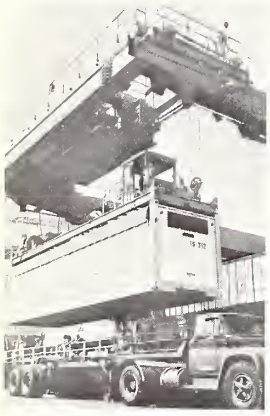

Van container being hoisted from its chassis to join others on ocean voyage. Story beginning opposite tells what improved containerization can mean for the safe, fast movement of U.S. farm perishables to overseas destinations.

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Containerization—Off the Ground and Onto the Ship

The overseas shipment of perishable farm products in van containers is moving beyond research into the dollar realities of international trade.

By JOHN E. CLAYTON and PHILIP L. BREAKIRON*
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When transport people look back at 1966 from the final third of the 20th century, they may see it as the Year of the Big Box. The tendency to handle and transport many individual packages in one large container, as a unit, is already significant in the movement of farm perishables to market here in the United States. And 1966 is witnessing an almost worldwide surge of enthusiasm, inventiveness, and activity that may extend the use of containerization to all modes of transport, to many additional products, and to the "four corners" of the earth.

This year we are almost certain to see the International Standards Organization (ISO) adopt a standard corner fitting for van containers, enabling them to be securely stacked in ships' holds and on deck and to be handled by almost all kinds of lifting equipment in use throughout the world. ISO already has given its blessing to a series of U.S.-recommended standard van sizes. Addition of the corner fitting will mean that, for the first time, U.S. van containers meeting these standards can move without difficulty across the ocean and throughout the transport systems of the other ISO countries, including Japan, England, and most European nations.

This leaping of the ocean barrier will, it is hoped, be accompanied by a leap across the paper barriers of documents, regulations, and inspections that now slow the movement of goods from one side of the ocean to the other.

U.S. farm exports may well benefit from the growth of containerization. Experience with trade fairs and trial shipments alike has indicated strong European interest in American fresh meats, poultry, fruits, and vegetables; but American producers attempting to enter these markets have long been discouraged by high handling and transport costs and high product losses. These factors have made it difficult for our producers to compete with those in countries closer to the European market.

Many carriers interested

Now, carrier firms and container manufacturers in Europe and America alike can plan ahead for greater standardization; and U.S. shippers can look confidently toward the day when van containers filled with U.S. farm produce will be a commonplace sight on the highways and railroads of other countries.

This hopeful outlook is reflected in the U.S. transport press. Transport periodicals, in almost every issue, report on expansion of containerization by this firm or that, to products and regions it has not reached before. *Via Port of New York*, published by the Port of New York Authority, put out a special October-November 1965 issue, "Transatlantic Transport Prevue," with 11 articles on as many phases of containerization and its implications for overseas trade.

Rail transport firms are buying more van containers and piggyback trailers for COFC (container on flatcar) and TOFC (trailer on flatcar) service. Piggyback service for perishable products is now offered by all major railroad systems in the United States and is the fastest growing segment of rail transport.

Moving onto the sea, piggyback becomes "fishyback"; ocean carriers are buying more container-ships or converting regular cargo ships for fishyback service to overseas points. Regular container-ship service for both refrigerated and nonrefrigerated vans is now available between the U.S. mainland and Hawaii, Puerto Rico, and Alaska, as well as between the west, east, and gulf coasts of the United States. Refrigerated vans also are being loaded on the decks of conventional cargo ships sailing from the United States to Central and South America and to Europe; and this year, regular container-ship schedules are being set up to serve the European market.

What containerization can do

What is causing the increase of interest—and investment—in containerization for agricultural perishables? The answer is efficiency: a better transport job, in terms of lower cost, less product loss, and more rapid movement.

The cost advantage of containers, however, has not been used to the full as yet by shippers of farm perishables. This advantage depends largely on how well the services of the various transport modes can be integrated, so that shipments can profit from the special features of each.

Even without complete intermodal integration, however, containerization can lower costs by lowering losses. It can eliminate the breakage and damage caused by repeated handlings; it can reduce pilfering; and it can protect the products from changes in outside environment en route.

Another cost-lowering feature is the saving of both labor and time. Containerization speeds the transfer of cargo from one transport mode to another, reducing the transit time and increasing the utilization of the transport equipment. It has been estimated, for example, that container ships spend only one-fifth as much time in port, loading and unloading cargo, as conventional ships do. For perishable products, containerized handling also prevents exposure to unfavorable temperatures and humidities on docks and in warehouses and other dangers from outside.

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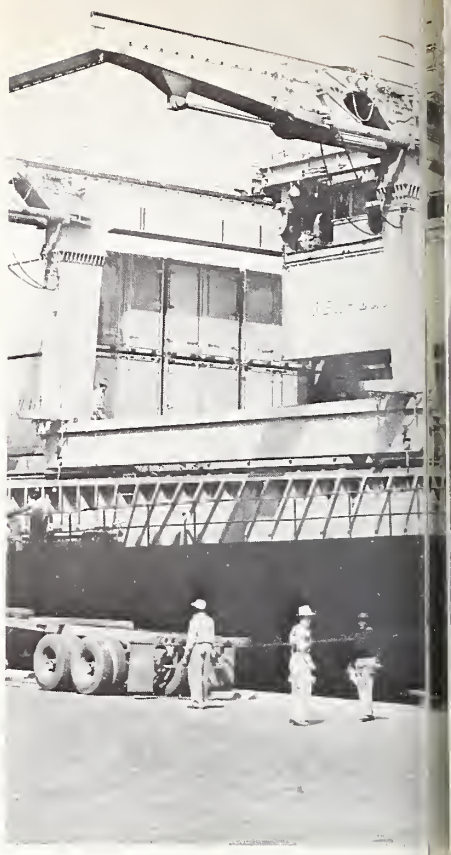

Many of today's containers move freely in all transport modes. Above, containers moved by truck and rail wait to board ship; right, container-ship nearly loaded.

In the broadest sense, containerization means using a Big Box to ship things in—whether it is a box with or without wheels, with or without refrigeration, ventilated or not ventilated. Most perishable agricultural products move in refrigerated or ventilated vans. Shippers naturally are most interested in boxes that not only will provide the low-cost, high-speed advantages of containerization as such, but also will control the environment of the shipment while it is en route. This is of special importance in overseas transport, where both costs and risks of spoilage and quality loss are increased by the greater length of the haul.

Progress brings problems

As in many other areas of discovery and invention, the idea of the Big Box has inspired a number of simultaneous but different experiments, some of them leading to different directions and to considerable investment in incompatible equipment.

This vigorous activity is both encouraging and discouraging to the container-conscious. In the genealogy of containerization, problems beget progress; but progress then begets new problems.

A big drawback in the progress made so far is lack of standardization. As U.S. use of containers has mushroomed, vehicles meant for one mode of transport have been combined—often not too successfully—with those meant for another. When one type of carrier adopts a particular form of containerization to meet its own needs but gives only superficial consideration to those of the other modes, the amount of interchangeability is apt to be limited.

Some conflicts of interest have arisen on the sizes of the boxes—not their width, for that is controlled by state highway clearance limitations, but their height and length. Corner fittings and securing devices adaptable to various types of handling and transport equipment have been another challenge.

Environment control has priority

The special needs of perishable farm products give rise to a number of requirements containerization must meet. Temperature must be kept at the proper level, and that level varies from one product to another. Frozen products need a constant low temperature; some fresh produce may need to have the temperature changed en route, to hasten or retard ripening. Humidity must be controlled so that the products will neither dry out nor accumulate too much moisture.

Air movement must suit the needs of the cargo. Frozen perishables need air circulation around the outside of the load to keep it frozen. Nonfrozen perishables need circulation through the load, to remove three kinds of heat: the heat of the field, the heat that all fresh fruits and vegetables generate in their natural "breathing," and the outside heat that may penetrate the van walls. For long trips especially, some ventilation is needed to control the carbon dioxide, ethylene, and other volatile gases the fresh products give off by breathing, for some of these gases can injure the product or delay ripening, while others can speed the ripening process.

Toward an international container

Hard work by many groups in this country and abroad has helped bring containerization closer to yielding its full benefits. These groups include the transport, refrigeration, and other industries; the Federal Government (particularly the Departments of Agriculture and Commerce and the Maritime Administration) and the American Standards Association (ASA).

For the past 5 years, ASA and ISO have been working to develop a common set of container standards. Some European members of ISO have their own set of standard sizes, and some interchangeable transport equipment moves freely within the European road-rail system. These containers, however, are relatively small; and the U.S. delega-

Bottled Florida orange juice ends history-making container trip to Anuga International Food Fair, Cologne, Germany.

tion to ISO's Technical Committee 104 (TC-104) urged the addition of larger sizes. In 1964, TC-104 agreed on standard vans 8 feet high and wide by 10, 20, 30, and 40 feet long, supplemented by a full set of smaller containers that can be combined in various ways to meet European needs.

These standard sizes based on 20-foot and 40-foot lengths present no insuperable problems to the container industry in any country; but in the United States, where large vans of different sizes have been in use longer, complete conversion will take time. Firms that are offering intermodal service with containers 24 feet or 35 feet long and 8 feet 6 inches high instead of 8 feet have a considerable investment already. The advantages of interchangeability are so great, however, that change is almost sure to come.

Standard fittings, standard documents

One milestone along the road to a worldwide container system is the likely adoption by ISO of a standard corner fitting recommended by ASA's Materials Handling Committee 5 (MH-5). This fitting can be used for bottom lifting with special hooks; for top lifting with standard hooks; for automatic top lifting with standard clevises; and for semiautomatic top lifting with twist locks. It can have a special locking device that holds vertically stacked containers securely together on a ship's deck or in its hold. This form of stowage is being used extensively on the new container-ships.

Standardization is as important in the papers accompanying containers across frontiers as it is in the containers themselves and in the transport modes that carry them. For this problem, too, 1966 may see some solutions offered. In December 1965, a Geneva meeting on containers, sponsored by the Economic Commission for Europe (ECE), tackled the documentation barrier from many angles. A working party will collect replies from governments to the questions the conference studies and will report to ECE this coming September.

Meanwhile, new information will come from the Through Container Shipment Project this spring, which will study controlled commercial container shipments from their inland-U.S. points of origin all the way to the United Kingdom and back again, to see where and how administrative delays occur. The objective is through documentation and simplification of all shipping documents, customs procedures, and inspections.

Overseas transport research by USDA

Working with U.S. transport firms and container manufacturers, shippers, and other firms, the U.S. Department of Agriculture has developed some new concepts in van and container refrigeration. The Transportation and Facilities Research Division of USDA's Agricultural Research Service has devised a method for rating the thermal efficiency of refrigerated containers and trailers. We have studied air circulation and ways of stacking perishables inside the vehicles. We also have looked into piggyback movements of perishables in this country, making suggestions to enable transport firms to do a better job of transporting perishables.

Most of our current containerization research seeks to apply these improved transport techniques in moving perishables to overseas markets. Tests indicate real opportunities to lower costs and reduce product deterioration and losses in overseas shipments of U.S. farm perishables.

Trying out the methods

One such test was a containerized shipment of grapefruit from Florida to Switzerland which had spoilage losses of only about 1 percent compared with the 15 percent normally experienced with the conventional movement of produce in ships' holds. This shipment also reduced handlings of individual boxes from about 10 to only 2.

A year ago this winter, we tested the idea that the cost of getting fresh fruit to overseas markets might be lowered if the fruits were shipped in ventilated containers during the cool months of the year rather than under refrigeration. Not only would refrigeration cost be avoided, but the dry-cargo vans could be loaded with nonperishable freight on the return trip. Two container-loads of fresh grapefruit were shipped from Florida to points in Europe. Ventilation kept fruit temperatures within an acceptable range, and the grapefruit arrived in excellent condition.

Last fall, culminating 3 years of Division research, a containerized shipment of 11,700 quart-size glass decanters of single-strength Florida orange juice arrived at the Anuga International Food Fair in Cologne, Germany, in excellent condition—no load shift, no damaged containers, no broken decanters. This was the first time such Florida orange juice had been available for sale in Europe.

As a result of this test shipment, West German distributors have been placing orders with Florida orange juice shippers. By February of this year, containerized shipments had increased from 4,000 cases of half-gallon glass containers a week to 6,000 cases. The first-trip was made in a 40-foot-long refrigerated van, but with the coming of cold weather 20-foot-long nonrefrigerated insulated vans were used, and ocean freight went down from $1,200 per van to $600.

Progress toward the ideal box

One of the concepts developed by USDA in cooperation with private industry is a van container that it believes

would help solve a number of the container problems already outlined.

Research on this project has now reached the point where a top engineering firm under contract with the Transportation and Facilities Research Division is nearly ready to submit final working designs for the building of a prototype van. But the concept itself already has been tested in many aspects through various kinds of trial shipments on cooperating ocean carrier lines.

USDA's Big Box is *intermodal, environmental, multipurpose,* and *international*—all at once. It can carry perishables from farm to market by any mode of transport—highway, rail, ocean, or perhaps even air—and by all in turn, if necessary. It can haul frozen and nonfrozen perishables—in the same load, if necessary. It also can haul dry cargo on the return trip. Finally, it meets ASA and ISO standards for size and uses the standard MH-5 corner fitting that will probably be internationally adopted this year.

Special features of USDA van

Several features give this van its adaptability. Because its wheeled chassis is separate, it can travel either as COFC or as TOFC within the highway-rail system; and it can move overseas by air or sea without the chassis, picking up wheels on the other side, if necessary. This ability to shed its chassis and refrigeration unit, combined with lightweight construction and thinner insulation, gives it a lower tare weight and higher payload when used for dry freight on the return trip.

The van's refrigeration and air distribution system is also highly adaptable. Air circulates laterally across cooling coils in the ceiling and down to the floor through false walls on each side. For nonfrozen perishables, the air then returns upward from the floor and through the load. For frozen loads, the air blowers are adjusted so that the cold air moves around the load by crossing under it and traveling upward through the other side wall to the ceiling coils.

The sizes of the multipurpose van include lengths of 10, 20, and 40 feet, each with height and width of 8 feet, but its air circulation system and other features can be used in vans of other sizes. The 40-foot van can be divided into four 10-foot compartments, each with 2 cooling coils in the ceiling and a blower on each side. With this coil and blower arrangement, each compartment can be kept at a different temperature, and it is even possible to refrigerate and ventilate simultaneously in different compartments. Thus the same van can carry products that require different environments.

In addition, the refrigeration plant, including compressor and condenser, is demountable either altogether or in part—a feature that increases economy for dry cargo.

Many containers already on the high seas

USDA's interest in helping to develop the best possible Big Box naturally centers around moving perishable farm products as far, as safely, and as cheaply as possible. However, a number of the ocean lines cooperating in this research are well aware that the Big Box principle has broad implications for their other trade also.

Thus, steamship companies that have pioneered in transporting today's intermodal containers across the Atlantic or the Pacific also are pioneering in the creation of container-ship fleets. These fleets are being built especially to haul the intercontinental containers of tomorrow.

For example, *American Export Isbrandtsen Lines* inaugurating this June a fortnightly container service fro New York to English Channel ports and northern Europ using two converted cargo ships equipped to carry standar size containers for both dry and refrigerated cargo. Eac vessel can haul 546 vans in its hold and 192 on deck.

American President Lines is converting six freighte into container-ships to handle standard-size container Beginning in 1967, it plans weekly sailings between Cal fornia and the Far East, some by way of Hawaii and Guan This company plans to convert all present equipment an shore facilities to conform with ISO-ASA specifications.

Grace Lines has four new sister ships in its Seataine Service, equipped to handle any kind of containerize cargo—including bananas. Its vans are standard-size, bu do not use the MH-5 corner fitting.

Matson Navigation Co. plans to extend its California Hawaii container-ship service to ports in the Far East. It California shore facility is equipped for the fast handlin of 25-ton containers by boom and crane. It uses vans tha are 24 feet long and 8½ feet high.

Moore-McCormack Lines expanded its door-to-door con tainer service to Europe with the February 11 sailing o the Mormacaltair, one of six converted cargo ships carryin 350 vans of 20 feet, 175 of 40 feet, or any combination (These vans are a non-ISO 8½ feet high.) Mormac alsc plans eight automated "roll-on, roll-off" vessels, each haul ing about 700 vans, starting by early 1967.

Rapid expansion of container fleets

Sea-Land Service, Inc., is now operating 16 container ships through 24 Western Hemisphere terminals and has 14 more freighters under conversion. The current fleet carries 35-foot vans, but the six "super-jumbo" ships to be added before 1970 will allot about a third of their 338-van refrigerated capacity and a fourth of their 923-van dry cargo capacity to 40-foot vans.

The *United States Lines* on March 18 began weekly door-to-door container service through Antwerp and Rotterdam with its American Racer, first of four ships converted to handle 20-foot and 40-foot containers with MH-5 fittings. This firm is converting five other ships; building five large new containerliners; planning six other faster ships, each to carry 800 containers; and considering extension of its container service to the Far East.

Problems that lie ahead

Much remains to be done to assure that containerization makes its maximum contribution to the improved transport of farm perishables. Beyond improved equipment comes improved management of the transport system. Expensive refrigerated vans must be kept moving to get the most out of the dollars invested—in lower transport costs, shorter transit time, and longer shelf life for the products after they reach their destination. Containers loaded with perishables must move as fast as possible through truck terminals and rail yards, should be placed on board ship at the last domestic port of call, and should be unloaded at the first foreign port of call. All modes of transport will have to coordinate arrivals and departures so as not to keep containers waiting at transshipment points. And any cost savings that result must be shared with farmers, shippers, and consumers in lower freight rates and food prices.

New Markets Boosting Total U.S. Cotton Sales to Africa

By GUY A. W. SCHILLING
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The last couple of years have seen the rise of new markets for U.S. cotton in five newly independent countries of northern and western Africa—Tunisia, Guinea, Ghana, Sierra Leone, and the Congo (Leopoldville). None of these markets are large as yet; one (the Congo) is normally a net exporter and may become so again. But last year, the U.S. cotton purchased by these countries, added together, pushed our total African marketings to a record high.

Five other African countries—the Republic of South Africa, Morocco, Ethiopia, Rhodesia-Nyasaland, and Algeria—have been U.S. markets during most of the past decade, with average takings per year ranging from about 34,000 bales for South Africa to around 900 for Algeria. All remain good outlets except Rhodesia, which is now using its own cotton and cotton from neighboring countries.

Tunisia, Guinea our biggest new markets

Largest of the new markets for our cotton in Africa is *Tunisia,* which has expanded the number of spindles in its cotton spinning mill from 12,000 in 1964 to 28,000 by the end of 1965. Tunisia began buying U.S. cotton in 1963-64 and upped its purchases the next year by 42 percent, to about 6,700 bales. It buys U.S. cotton under Public Law 480 and with free dollars, on tenders through its embassy in Washington. This market is growing.

In February 1965, *Guinea* began operating one new mill with 20,000 spindles and 696 looms; and during the crop year 1964-65, it imported about 3,000 bales of U.S. cotton under P.L. 480. As the mill increases the efficiency of its operations, these imports are expected to increase also. Guinea does not yet produce any appreciable quantity of cotton itself. In the past, it has bought its P.L. 480 cotton through exporters' agents in Le Havre.

Sierra Leone, Ghana also new buyers

Sierra Leone, a small country with no spinning mill of its own, has an agreement under Title IV of P.L. 480 providing for third-country processing of 5,000 bales of U.S. cotton. As yet, no deliveries have been made.

Ghana has two cotton spinning mills with a total of 30,300 spindles, which began operations within the past year and a half. One of these mills, with 10,000 spindles, is owned and operated by Hong Kong interests; it works 7 days a week with 3 shifts of 8 hours each, 353 days a year. The newer mill, with 20,300 spindles, is state-owned and run by French technicians. Consideration is being given to adding more mills, but this will depend on the plans of the new government.

Ghana can be expected to become a good market for cotton since its own possibilities for growing cotton are limited. Its purchases from the United States—so far, small—have been made through French agents of U.S. exporters.

Congo a temporary customer

The *Democratic Republic of the Congo (Leopoldville)* was a net cotton exporter before its independence. The rebellions of the last 3 to 4 years, however, have reduced the Congolese cotton crop from a high of 275,000 bales in 1959-60 to an estimated 25,000 bales in 1965-66. This situation has left no cotton available for export and has created a temporary need for imports.

The Congo has four spinning mills with a total of 99,250 spindles using cotton, besides one mill with 750 spindles using only waste. In 1964-65, the United States supplied 31,154 bales of cotton under Title I of P.L. 480. Most of this cotton was bought through agents of American exporters in Belgium. With improved political and economic conditions in the Congo, however, one may expect that more Congolese cotton will be available for use and that imports will slowly decline.

Older markets that are still active

Biggest among the U.S. cotton markets in Africa is still the *Republic of South Africa.* Its U.S. imports declined sharply after reaching a peak of 53,000 bales in 1961-62, but then turned upward again. With the rapid growth of its spinning industry during the past 5 years, it now has about 440,000 spindles and 7,400 looms.

South Africa's local cotton production, although increasing, cannot meet the need for certain qualities of cotton, and imports of these will continue to be sizable. South Africa buys U.S. cotton through agents of U.S. exporters.

U.S. EXPORTS OF COTTON TO SOME OLD AND NEW AFRICAN MARKETS
[Bales of 480 pounds net]

Country	Crop year beginning August 1									
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
	Bales	*Bales*	*Bales*	*Bales*	*Bales*	*Bales*	*Bales*	*Bales*	*Bales*	*Bales*
Algeria	363	2,070	772	1,227	—	105	206	436	2,522	1,611
Congo, Rep.	—	—	—	—	—	—	—	762	216	31,154
Ethiopia	1,738	2,545	459	—	14,978	4,574	12,889	15,945	9,219	4,355
Ghana	—	—	—	—	—	—	—	312	—	458
Guinea	—	—	—	—	—	—	—	—	—	3,247
Morocco	5,631	15,407	10,189	10,922	11,332	9,608	14,677	8,248	15,971	12,427
Rhodesia & Nyasaland	—	7,590	8,515	397	3,742	—	1,461	26	—	—
Sierra Leone	—	—	—	—	—	—	—	—	—	(1)
Tunisia	—	—	—	—	—	—	—	—	4,723	6,691
South Africa, Rep.	8,778	31,104	36,704	14,738	44,790	52,640	53,078	19,585	38,189	44,756
Other	759	1,782	689	53	2,997	115	747	20	76	1,616
Total	17,269	60,498	57,328	27,337	77,839	67,042	83,058	45,334	70,916	106,315

[1]Had an agreement for 5,000 bales of cotton from the United States under Title IV of P.L. 480 for processing in a third country. No deliveries reported during year.

Second biggest taker of U.S. cotton among the older markets, *Morocco* today has eight mills with 82,830 spindles and plans to add 12,440 more spindles and 1,700 looms in the next year. Over the past 10 years, it has been a market for an average 11,500 bales of U.S. cotton per year, although it also consumes large quantities of rayon staple fiber. Purchases of U.S. cotton are made through French connections or agents of American exporters in Morocco.

Ethiopia (with Eritrea) now has 133,544 spindles operating, with no immediate increase in sight. Consumption of manmade fibers is substantial. Its imports of cotton from the United States, averaging 6,700 bales a year over the past decade, have supplemented its own cotton and imports from Sudan.

In 1965-66, Ethiopia's U.S. cotton purchases will increase with the beginning of a 2-year 40,000-bale program under Title IV of P.L. 480. Ethiopia buys through local agents of U.S. exporters or direct from U.S. shippers.

Two small markets

Algeria, a small but reasonably steady market for U.S. cotton averaging about 950 bales a year, had two or three French-run mills in late December 1965, operating about 10,000 spindles. Reportedly, there are tentative plans fo constructing four new mills, to be financed by the Unite Arab Republic, France, Bulgaria, and Yugoslavia. U.S cotton is purchased through French firms.

Cotton production in Algeria is now about 1,500 bale and should eventually increase with the easing of politica tension that has interrupted the development of the countr since 1959.

Rhodesia, which had imported an average of 3,000 bale of U.S. cotton a year through 1961-62, has since that tim obtained its supplies from expanded domestic productio and imports from neighboring countries. It still has abou 56,000 spindles in its two mills, the same as in 1961.

Market expansion limited

These 10 African markets, supplemented perhaps in time —or from time to time—by others on a similar scale, coul perhaps account again in some years for as much as 100,00 bales of U.S. cotton. But, considering the continent's owr tremendous cotton output and the importance of cotton to the economy of every African nation that produces it, one can hardly expect to see much more expansion in the U.S. share of this market.

A Digest of Trade-Liberalizing Actions Taken in 1965

Throughout 1965, the U.S. Government continued its work to have countries remove nontariff restrictions on their imports of agricultural products. It pressed for this trade liberalization through official government consultations in Western Europe, Japan, and Canada, as well as in Geneva under the General Agreement on Tariffs and Trade (GATT) and in Paris under the Organization for Economic Cooperation and Development (OECD). These meetings, plus other economic factors, contributed to an easing of certain import restrictions in 1965.

A list of some of the liberalizing actions taken on agricultural products last year follows:

Austria—No longer subjects imported apples and pears to the minimum diameter requirements and is now permitting imports of Grade No. 2 apples and pears; it also lifted variety limitations applicable for apples imported until November 30;

British Guiana—Removed temporary prohibition on imports of poultry carcasses, poultry, and eggs;

Canada—Recently amended the Canada Agricultural Products Standards Acts to permit use of the ¾-bushel basket as a container for imported fresh fruits, except at the retail level;

Chile—Removed prohibition on imports of frozen chickens and beans and of dehydrated potatoes;

Denmark—Liberalized certain fresh, chilled, frozen, and preserved vegetables;

France—Liberalized canned grapefruit containing added sugar and progressively increased import quotas on various items of fresh and canned fruits;

Italy—Rescinded sanitary prohibition on poultry parts;

West Germany—Expanded quotas for apples, pears, canned cherries, dehydrated alfalfa, ice cream mix, and applesauce;

El Salvador—Rescinded sanitary prohibition on animals and animal products;

Finland—Liberalized imports of peanuts, boiled linseed oil, fatty acids, acid oils, and fatty alcohols;

Iceland—Liberalized certain processed food products and miscellaneous animal oils;

New Zealand—Liberalized dried fruit, molasses, sausage casing, and some other commodities;

Norway—Increased import quotas for apples, live animals, flower bulbs, cut flowers, melons, ice cream powder and pudding powders, egg albumin and preparations used in manufacture of bakery products; temporarily lifted the embargo on pear imports;

Spain—Liberalized vegetable fibers, vegetable produce for animal feed, and cattle;

Sweden—Temporarily lifted embargo on apple imports;

Zambia—Liberalized imports of barley, barley malt, sorghum, sorghum meal and malt, certain meat pastes and potted meats, and sausage casings.

Fruits show gain

These efforts and those taken in earlier years have had encouraging results. For example, following the 1964 easing of West German restrictions on apples and pears, U.S. exports of those commodities to West Germany increased around 100 percent.

Similar changes took place in the case of U.S. exports of canned fruits and asparagus to France. For many years after the war, imports of these products into France had been practically prohibited by quota and licensing restrictions. U.S. action under the GATT brought about an easing of these restrictions with the result that U.S. exports of canned fruits and asparagus to France during 1963-65 rose threefold.

Notwithstanding the success achieved to date, much work still remains. Many countries, particularly in Western Europe, continue to restrict for protective reasons imports of many farm commodities of interest to the United States.

UAR's Second 5-Year Plan Shifts Stress to Agriculture

By CLINE J. WARREN
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The United Arab Republic's Second 5-Year Plan, which began last year and will probably be extended to cover 7 years, aims at reducing the country's growing food deficit. In its previous development plan the emphasis was on industrial expansion.

Although substantial gains have been made in expanding food production in recent years, output has been insufficient to provide adequate diets or to meet rising demands brought on by population growth, higher per capita income, and urbanization. Increasing food imports have been required to bridge the gap.

The plan allocates some $1.4 billion to agriculture. Reportedly, this is twice the allocation to agriculture under the First 5-Year Plan (1960-65) and supposedly represents close to one-fourth of all appropriations for investment by mid-1970. Greater emphasis on agriculture, however, is only one phase of the country's massive economic effort to double national income in the decade ending in 1970. Consideration is also being given to both economic measures and social reform projects.

Water central to program

Projects to promote agricultural output can be grouped in two major categories: those to bring more land under the plow and those to raise productivity on the 6.5 million acres now being cultivated.

Bringing more land under cultivation depends upon the availability of additional water for irrigation. It is estimated the water from the Aswan High Dam will permit a 1.5-million-acre expansion of the country's total cultivated area and conversion of 730,000 acres to more intensive cultivation through perennial irrigation. Indications are that the dam will be completed a year ahead of schedule, and present plans call for it to reach full water-storage capacity by 1970.

Several land reclamation projects are underway, but irrigation of crop area with underground water is expensive and extremely slow. Until water becomes available from the Aswan High Dam, prospects for any significant expansion in cultivated area appear dim. Therefore, any substantial gain in agricultural output within the next 5 years must come from additional production on areas already under cultivation.

More intensive cultivation relies on the interplay of a number of factors. Among these are the adoption of proper irrigation and drainage practices, the application of the right rotation methods, and, above all, the availability of the various requisites—such as fertilizer, improved seeds, farm machinery, credit provisions, and pesticides—which play a vital role in the production of agricultural products.

Efforts to improve yields

Cultivation is already intensive, with each cultivated acre producing an average of 1.5 crops annually. Although yields are relatively high, efforts are being made to raise them even further. Propects for improving yields appear best for wheat, corn, vegetables, and citrus fruits, while cotton, rice, and sugarcane are less promising.

Perhaps the most outstanding development planned in the area of intensive cultivation is the greater use of commercial fertilizers. Consumption of nitrogen fertilizers is approaching 200,00 metric tons annually. According to the UAR's Minister of Agriculture, this is little more than half the optimum capacity. Another major effort toward improving yields is an expanded program of new-seed development and distribution. Pesticides will also be made available in larger quantities.

To develop the full potential of the livestock industry, fixed supplies of cottonseed cake and other feed will be distributed on an annual basis among the Provinces. Projects to raise livestock productivity include better selection and breeding, and the number of animal health centers in the country is slated for an increase.

Reportedly, adequate agricultural credit facilities that can meet seasonable requirements and other emergency needs of farmers are being made available. Many cooperatives, through which modern extension services and other educational and health benefits will be provided, have been established in rural areas. For the promotion of mechanization, the plan provides for mechanized service stations and maintenance and repair shops.

First plan missed goal

Heavier emphasis on agriculture in the Second 5-Year Plan reflects a shift in the country's approach to solving its economic ills.

Under the First 5-Year Plan, the building up of domestic industry to produce products for export was heavily dependent upon importing raw materials and machinery at a cost which made large inroads into the country's foreign exchange holdings. Furthermore, some difficulties were reported in developing sufficient foreign markets for these manufactured products.

Overall aims of the First 5-Year Plan were for a 40-percent expansion in the country's economy. Although official figures are incomplete, indications are that an annual growth rate of about 6 percent was recorded, whereas a growth rate of 7 percent would have been needed to obtain the stated goal.

Using 1960 as a base, total agricultural output increased 20 percent by 1965, giving a net per capita increase of 3 percent after allowances are made for population growth. Gains in several commodities were substantially larger than in overall agricultural output. For example, from 1960 through 1965, rice production registered a 55-percent increase.

Production of export crops made substantial gains over those grown largely for local consumption, suggesting that farmers found them more profitable. Cotton production was up 18 percent as against only 5 percent for wheat, although there was no significant change in acreage planted to either crop. Gains in rice and onions, second and third in agricultural exports after cotton, help support this point. Also, the growing cash market for vegetables, fruits, and flowers in countries of Western Europe has caused the UAR's production of these crops to expand.

Norman Comben *and* **Colin Campbell** *of the U.S. Feed Grains Council, London, say feeding demonstrations strengthen demand for quality U.S. dehydrated alfalfa.*

Promotion and Growth of British Market for U.S. Dehy

The volume of production of dried green crops in the United Kingdom has varied considerably since the 1930's when the industry started in a small way. During the Second World War, when animal feeds were very scarce, production increased substantially with government encouragement and by 1945-46 had reached 235,000 long tons per year. A large part of this production came from wartime air fields, and as these were returned to normal agriculture and other uses after the war, production declined. As relatively cheap home-produced and imported cereals again became available, they competed directly with dried green crops as bulk feedingstuffs.

Current production in Britain

At the present time, average annual production is running at a level of about 100,000 tons per year, 60 percent of which is dried grass and 40 percent dried alfalfa. The industry is in need of modernization; production costs are high and the product highly variable.

The usage of dried green crops in the United Kingdom has followed the pattern of production. During and shortly after the Second World War, most classes of livestock received some dried grass or alfalfa because of the shortage of other feeds. When cereals became more readily available, the use of dried green crops declined, and at the present time, with a few exceptions, almost the whole production is used in layer rations in order to enhance egg yolk color.

The U.S. Feed Grains Council conducted a preliminary study of the usage of dried green crops in the United Kingdom during 1963. Discussions were held with individual green crop driers, their U.K. association, and the animal feed industry.

E. A. Mengering, manager of the Alfalfa Marketing Division of the Ohio Farm Bureau Co-operative Association, visited Europe and reported his belief that there was a promising future for British imports of U.S. dehy. Later the same year Richard Kathe, executive vice-president of the American Dehydrators' Association, and Carrol Syverson, general manager of the Alfalfa Division of Archer-Daniels-Midland, visited England. Meetings were arranged with a number of local producers and with a cross section of the compound animal feed industry.

Potential for U.S. dehy

It was obvious that there were a number of good potential outlets if imported U.S. dehy could be landed at a competitive price. Local production was so variable in quality that feed compounders were interested in a product which was guaranteed to conform to specified standards of protein and carotene content. At least one large English producer wanted to use 20 percent U.S. dehy for blending to upgrade his own low-quality production.

Papers on dehy delivered the following March at the U.S. Feed Show at the London Trade Center and at conferences in Belfast and Dublin drew considerable attention from the large groups of livestock feed technicians who attended. These were given by Dr. Richard Wahlstrom of South Dakota State University and by Alan Ward, director of Aynsome Laboratories Ltd., technical consultants to the U.K. Association of Green Crop Driers and the National Association of Corn and Agricultural Merchants.

Cooperation with British group

During the London show, discussions between USFGC and the green crop driers group resulted in plans to cooperate in the technical field with Mr. Ward acting as coordinator. Also discussed, although agreement was not reached, were plans to set up a joint promotion program to increase utilization of dried green crops.

During 1964, enquiries began to be received from a number of British feed compounders about supplies of U.S. dehy. However, mainly bagged consignments were requested, and no small quantities were available. Toward the end of the year, 1,000 tons were imported via the Continent into Hull for blending with low-quality local production and a small consignment also came into Bristol, again probably as a transshipment.

Partly as a result of the promotional efforts of the U.S. Feed Grains Council, one of the larger international shippers became interested in U.S. dehy, which resulted in the transshipment of small cargoes from the Continent to U.K. ports in 1965.

European activities of the U.S. Alfalfa Export Corporation began in the fall of 1964 with the appointment of a London agent, Goodlake Commodities Ltd. The London office of USFGC worked with this company to initiate marketing activities for U.S. dehy.

Feeding demonstrations begin

During the winter of 1964-65, USFGC set up two practical feeding demonstrations designed to show that dehydrated alfalfa could be used with benefit in rations for the fattening of lambs and beef cattle. In each case the results indicated that the levels of dehydrated alfalfa used were higher than could be economically justified by the price of the product. These initial demonstrations did, however, arouse interest in feeding dehy for lamb and beef production, and both indicated that it could profitably be fed at lower inclusion rates in the diet.

The following winter, a dehydrated alfalfa/urea protein supplement was formulated and this has been fed in two demonstrations to fattening lambs and in three demonstrations to cattle being fattened for beef. This supplement—which contained 50 percent of dehy and made up 12½ percent of the diet—cost $28 per long ton less than comparable supplements based on vegetable proteins.

Only one of these demonstrations has been completed, but results are most encouraging and indicate that dehy/urea supplements can make a substantial saving in fattening costs. The lamb fattening demonstration already completed has clearly shown that the supplement containing dehydrated alfalfa was the most efficient.

Clockwise from above left: Speakers at 1964 feed show in London were Dr. Wahlstrom (1) and Alan Ward; Glasgow demonstration showed second-draw blackface ewe lamb fed a mixture of 85 percent kibbled maize/15 percent soya-groundnut-urea pellets with group in rear fed 85 percent maize/15 percent lucerne-urea pellets; Dr. R. G. Hemingway of Glasgow University (1) briefs British newsmen on demonstration results.

When it was used with rations based on either corn or barley, lambs achieved the best weight gains, as well as the best feed conversion, of all the groups of livestock tested.

Breeding sow test

Another demonstration is also in progress to indicate the value of dehydrated alfalfa in breeding sow diets. In this trial, 7½ percent of dehy is being used with 30 sows over a 2-year period, with a control group using the same ration but with cereals replacing the dehy. No results from this demonstration are yet available.

A great deal of interest has been aroused by these feeding demonstrations, particularly because no comparable work has previously taken place in the United Kingdom. Articles have been published on the results, and queries are continually being answered on the use of dehy in animal feeding.

In January 1965, the U.S. Feed Grains Council sponsored a visit by Alan Ward to the United States, where he presented a paper on "Dehydrated Forage Crops as Feed Ingredients" to the 1965 convention of the American Dehydrators Association. He also studied modern developments in the production, storage, and feeding of dried green crop products. These activities were undoubtedly of great help to the British green crop driers in their own efforts to promote more extensive use of dried green crop products.

Trade contacts are now being made with country feed compounders in the United Kingdom. U.S. dehy is always discussed with these companies, to most of whom the product is entirely new.

Blending now top use

As a result of these various activities, British imports of U.S. dehy have gone from 1,500 tons in 1964 to more than 4,300 tons in 1965, mainly for blending with local production.

The quality and dependability of U.S. dehy is now well on the way to being established. Considerable interest is already being shown in the product and if, in the near future, relatively small quantities can be made available regularly at a competitive price, a useful trade can certainly develop for dehy as a dependable feed ingredient —in addition to the market already established for dehy for blending with locally produced dried green crops.

It is only through practical feeding demonstrations that the full feeding value of dehy in intensive livestock rations can be shown, however, for there is still relatively little acceptance in the United Kingdom of the value of dehy, particularly in the feeding of the large farm animals.

Italy's Food, Labeling, Additive Regulations Discussed at Milan Trade Center Roundtable

Italy's food and labeling laws—their complexity and importance to U.S. and other food exporters—was the subject of a roundtable discussion at the Milan Trade Center earlier this year. Additives came in for particular emphasis by the participants—most of whom were agents for imported food products—and the program's moderator, Dr. Antonio Neri, editor of the scientific nutrition magazine, *Scienza dell'Alimentazione.*

According to Dr. Neri, the needs of the modern food industry and related distribution problems are coming in for increasing consideration in Italy, although controls on the introduction of new additives remain rigid.

Briefly summarizing Italy's governmental controls on the use of additives, Dr. Neri noted that Italy's food laws underwent some revision in 1963. Legislation that year modified provisions of a 1962 law which required that ingredients and additives in processed foods must be identified on the label. Also in 1963, Dr. Neri said, Italy published and later lengthened its first positive list of additives allowed for alimentary use.

Before food processors can use new additives in foods going on the Italian market, they are required to submit a request to the Italian health authorities with detailed information on the additive's toxicity and necessity. The Italian Health Department then assigns a group of additive specialists from its technical consulting branch, the Istituto Superiore di Sanita, to examine the request.

The questions asked Dr. Neri following his remarks are indicative of the wide scope of the problems affecting food exporters.

Q. May imported products be traded with Italy with their original labels or must they be relabeled after their arrival in Italy?

A. In the case of reduced stocks, it would be sufficient to stick a small label, printed in Italian, on the back of the container over the original label. Most important is that this label identify all additives as required by Italian law. Difficulties are to be expected since countries frequently differ in what they consider additives and what they consider ingredients.

Q. Is it necessary to state on the label the commercial name of the additive?

A. It is compulsory to state the chemical name of the additive. The label should be worded "Containing . . ." or "Colored with . . ." Flavor must be identified as natural or artificial.

Q. May bleached flour be used in Italy?

A. No. Neither bleached flour nor products containing bleached flour may be used.

Q. Can bleached flour be put on the positive list?

A. This would be very difficult.

Q. Our firm imports pickles and other products in oil to which vitamin C is added. Italy does not allow this additive even though it occurs in some foods. Citric acid is used as a preservative for canned shrimps in the United States and some other countries. In the case of shrimp, does Ita consider citric acid an additive or ingredient?

A. In this case citric acid is consi ered a technological ingredient. Ita permits the use of some acids—citr tartaric, and lactic—as pH stabilize

Q. We have had problems in Ita selling prunes which have been treat with more than 600 mgr. of sulf dioxide per kilogram.

A. While recent studies on the to icity of sulfur dioxide have shown th it is essentially nontoxic in the qua tities used by most countries, Italia health authorities are still cautious.

Q. What are the regulations for th coloring of cheese?

A. Cheese can be colored providin that artificial coloring is noted on th label. If the coloring substance is o natural origin as the Annatto an carotene, it is not compulsory to men tion it. In Italy, coloring of cheese does not present the problem it doe in other countries since color is no an important factor in the buyin habits of Italian consumers.

Upper Midwest To Hold Farm Trade Conference

Secretary of Agriculture Orville L. Freeman has announced that the U.S. Department of Agriculture and the University of Minnesota, in cooperation with the Minnesota World Trade Association, will sponsor an Upper Midwest Conference on Agricultural Export Trade in Minneapolis May 18 and 19.

Five states, all important contributors to today's record-level U.S. agricultural exports, will participate—Minnesota, North and South Dakota, Iowa, and Wisconsin. Sessions will feature exploration of ways whereby Upper Midwest agriculture can further expand its overseas markets.

"This will be an important trade conference, and we are very pleased at the opportunity to join forces with Minnesota and neighboring States in sponsoring it," Secretary Freeman said.

"American agriculture is the world's most dynamic supplier of food and feed, and the Upper Midwest is a leading producer in this agriculture. It is making an important export contribution, both in 'trade' products for industrialized countries and 'aid' products for less developed countries.

"This is an ideal time, and the Upper Midwest is an ideal place, in which to take inventory of where we can go in our agricultural trade relations with the rest of the world."

Governor Karl F. Rolvaag of Minnesota and Governor Harold Hughes of Iowa are scheduled to join President O. Meredith Wilson of the University of Minnesota and Secretary Freeman as leading conference participants.

Business, industry, and State government participants include Robert Bunker, president, Minnesota World Trade Assn.; Burton M. Joseph, president, I. S. Joseph Co., Inc.; W. R. Pearce, vice president, Cargill, Inc.; Atherton Bean, chairman of board, International Milling Co.; John Carroll, president, American Hoist and Derrick Co.; Robert F. Gray, chairman of board, Hormel and Company; Earl B. Olson, Farmers Produce Co.; Hugh Galusha, president, Federal Reserve Bank of Minneapolis; John Chrystal, Iowa Superintendent of Banking, and Russel G. Schwandt, commissioner, Minnesota Department of Agriculture.

Advance registration is being handled by the Department of Agricultural Short Courses, University of Minnesota, St. Paul, Minnesota.

The Netherlands Imports Less Rice

Rice imports into the Netherlands in 1965, at 50,200 metric tons, were down 30 percent from 71,309 tons in 1964 and about two-thirds the 1956-60 average. Principal sources were Thailand, the United States, and Burma. A little over 25 percent came from other countries of the European Economic Community compared with 10 percent in 1964.

Imports of semimilled rice were the lowest since 1953. At 25,500 tons, they were about half the 50,550 tons imported in 1964 and were well below the average. Imports of semimilled from Thailand—the principal source—were half the 27,600 tons taken in 1964. From the United States they declined to 5,300 tons from 12,500 in 1964. However, imports from Italy and Egypt were larger in 1965.

However, imports of milled whole rice for food, at a record 10,400 metric tons, jumped 55 percent and were about twice the average of recent years. This compares with 6,700 tons in 1964, and the previous high of 7,400 tons in 1961. Over half came from the United States, while Thailand and Surinam were other main sources.

Broken-rice imports, at 14,300 tons, were about equal to the 1964 level. Burma, Brazil, and Surinam were the principal sources for broken rice.

THE NETHERLANDS RICE IMPORTS

Country of origin	Average 1956-60	1963	1964	1965
	Metric tons	*Metric tons*	*Metric tons*	*Metric tons*
EEC countries:				
Belgium-Luxembourg	5,178	1,876	3,696	1,452
France	208	—	—	—
Italy	2,609	1,796	2,364	4,484
Germany, West	1,306	676	1,117	436
Total EEC	9,301	4,348	7,177	6,372
Non-EEC:				
Argentina	393	1,583	947	1,114
Brazil	1,000	(1)	(1)	2,967
Burma	7,791	(1)	593	5,444
Cambodia	(1)	(1)	1,049	1,383
Mainland China	8,339	1,117	5,084	155
Egypt	2,156	748	990	1,181
Surinam	1,699	4,910	3,404	3,847
Thailand	27,815	17,146	30,462	16,407
United States	7,623	15,183	18,813	10,724
South Vietnam	604	3,662	842	(1)
Other countries	6,160	[2]6,354	1,948	606
Grand total	72,881	55,051	71,309	50,200

[1]Negligible, if any. [2]2,032 tons from Pakistan.

Compiled from *Maandstatistick van de in-, uit-en, doorvoer per Goederensoort.*

Argentina Estimates Bumper Corn Crop

The Argentine Department of Agriculture has announced its first estimate of the 1965-66 corn crop at 7,200,000 metric tons (283 million bushels). This is 40 percent above 1964-65 outturn and 63 percent over the 1955-59 average.

Climatic conditions in the main corn-producing Provinces of Buenos Aires, Córdoba, Santa Fe, and Entre Rios were highly favorable for the crop. An estimated average yield of 33.7 bushels per acre, compared with 26.7 last year, is attributed to increased use of hybrid seed as well as the good weather. The only unfavorable factor at present is the continuation of rains which could lower quality and impede machine harvesting. Harvested acreage is forecast at 8,406,000 acres this year against 7,574,000 in 1964-65.

World Barley, Oats Output Nears Record

World production of barley and oats in 1965 totaled 135.4 million metric tons, just slightly below the 1964 record level of 135.8 million tons, according to revised estimates of the Foreign Agricultural Service.

Barley production is now estimated at 4,200 million bushels, 2 percent below the record 1964 crop. Oat production is estimated at 3,005 million bushels, 4 percent higher than in 1964.

A detailed table and analysis are published in the April issue of the *World Agricultural Production and Trade—Statistical Report.*

Argentine Cotton Crop Falls Sharply

The 1965-66 cotton crop now being harvested in Argentina is likely to total no more than 400,000 bales (480 lb. net). This represents a sharp downward revision from earlier estimates and is 36 percent below the 1964-65 crop of 625,000 bales.

The 1965-66 crop was severely damaged by rains and floods in February and March when the cotton was reaching maturity. Rains prevented adequate spraying and cultivating and resulted in excessive insect damage and losses in both quality and quantity.

Area devoted to the 1965-66 crop is estimated at 1,250,000 acres, about 8 percent less than that of the previous year. Dry weather at planting time and the economic incentive provided by alternative crops, like sunflowerseed and corn, were largely responsible for the decline in this season's area.

In the first 6 months of the current season, Argentina exported 26,000 bales of cotton, most of which went to Western Europe. Total exports this season may reach 50,000 bales. Because export prices were not competitive, exports in 1964-65 totaled only 1,000 bales. The Cotton Board requested an 18-percent tax rebate on exports that year, but its request was not granted by the government.

Argentina imported 73,000 bales of cotton in 1964-65, mostly long-staple cotton from Peru. Stocks on hand on August 1 will likely be close to a half-million bales.

Consumption of cotton in 1965-66 is estimated at 525,000 bales. In 1964-65 consumption amounted to 510,000 bales, the highest level since 1958-59.

Sudan Changes Cotton Price Policy

Sudan recently established new policies in cotton marketing which have allowed the country to reduce its inventory of unsold 1964-65 crop cotton. The pickup in sales is largely the result of a March 12 directive issued by the Sudan Gezira Board canceling auction reserve prices for all cotton and establishing a system of unannounced reserve prices which may be changed on short notice. In addition,

the March 12 directive provides for rebates on large purchases of long-staple cotton during the period March 15 to October 31, 1966.

By mid-April, unsold stocks of Sakel-Lambert were around 100,000 bales (480 lb. net). Active inquiry by Mainland China, India, and Japan continued, especially for lower grades. Around 70 percent of unsold stocks of long-staple cotton is Lambert, two-thirds of which is G4L or higher in grade.

Harvesting of the 1965-66 crop is now underway. Some new-crop cotton is already entering marketing channels, and sizeable foreward purchases of new-crop Lambert grown on private estates have recently been made. The total crop this season will likely be about 800,000 bales, compared with 700,000 in 1964-65.

Ceylon's Exports of Coconut Products Decline

Exports of copra from Ceylon during calendar year 1965, at 40,946 long tons, declined by 30 percent from the 58,081 tons shipped out in 1964. The decline principally reflected reduced movements to India. Movements to the USSR, not previously recorded, amounted to more than one-sixth of the total.

CEYLON'S EXPORTS OF COPRA, COCONUT OIL, AND DESICCATED COCONUT

Country of destination	1964	1965
	Long tons	*Long tons*
Copra:		
India	50,683	26,548
U.S.S.R.	—	7,176
Yugoslavia	1,988	3,352
Pakistan	4,965	3,359
Others	445	511
Total	58,081	40,946
Coconut oil:[1]		
China, Mainland	14,540	10,627
Pakistan	15,854	12,454
U.S.S.R.	13,533	9,497
Italy	13,516	10,446
United Kingdom	13,923	7,916
Canada	10,154	8,226
Germany, East	6,489	7,079
Netherlands	4,233	2,477
Cuba	—	2,150
Burma	7,449	2,136
Romania	861	1,777
Germany, West	2,606	1,904
South Africa	170	1,640
Morocco	1,868	1,344
Others	12,363	7,225
Total	117,559	86,898
Desiccated coconut:		
United Kingdom	19,054	18,508
West Germany	7,488	6,638
East Germany	2,764	4,427
Spain	2,682	2,852
Netherlands	3,362	2,912
Canada	2,757	1,918
South Africa	1,733	1,626
France	1,745	1,695
Belgium	1,609	1,695
Others	10,783	9,766
Total	53,977	52,037

[1]Crude and refined.
Ceylon's Custom Returns.

Ceylonese exports of all categories of coconut oil, at 86,898 tons, dropped by 26 percent in 1965 from the 117,559 tons exported in 1964. Although shipments to most markets declined in 1965, movements to Communist-Bloc countries accounted for nearly two-fifths of the total, compared with about 30 percent in the previous year.

Exports of desiccated coconut, at 52,037 tons in 1965 were slightly below the 53,977 tons shipped out in 1964. Exports to the United Kingdom accounted for nearly two fifths of the total. As in 1964, most of the shipments moved to Europe. Movements to the United States were virtually nil compared with about 150 tons in 1964.

South Africa's 1966 Dried Fruit Packs

The 1966 pack of South Africa's most important dried fruit—raisins—is estimated at 10,200 short tons, a slight increase from the 1965 pack of 9,700 tons. The 1966 prune pack is estimated at 2,000 tons—about 25 percent below that of the previous year. Peach production is estimated at the 1965 level of 2,200 tons.

SOUTH AFRICA'S DRIED FRUIT PRODUCTION

Item	1965[1]	1966[2]
	Short tons	*Short tons*
Apples	100	100
Apricots	1,400	1,500
Currants	900	1,000
Peaches	2,200	2,200
Pears	600	500
Prunes	2,700	2,000
Raisins	9,700	10,200
Other	200	200
Total	17,800	17,700

[1]Revised. [2]Estimated.

Raisin exports may total 3,700 tons, compared with 3,500 in 1965. The United Kingdom is by far the largest market for South African dried fruit.

SOUTH AFRICAN EXPORTS OF SELECTED DRIED FRUITS

Item	1965	1966[1]
	Short tons	*Short tons*
Apricots	1,000	1,100
Peaches	700	700
Pears	100	100
Raisins	3,500	3,700
Fruit Salad	1,000	900
Other	100	100
Total	6,400	6,600

[1]Forecast.

SOUTH AFRICA'S RAISIN SUPPLY AND DISTRIBUTION

Item	1964-65	1965-66[1]
	Short tons	*Short tons*
Supply:		
Beginning stocks (Dec. 1)	(2)	(2)
Production	9,700	10,200
Total supply	9,700	10,200
Distribution:		
Exports	3,500	3,700
Domestic disappearance	5,600	5,400
Change in stocks (Nov. 30)	[3]600	[3]1,100
Total distribution	9,700	10,200

[1]Estimated. [2]Not available. [3]Actual stocks not available. Figure represents difference between production and distribution.

Australian Sultana Pack Smaller

Australia's 1966 sultana production has been tentatively forecast at 75,000 short tons—down 17,700 from the previous year's record. The smaller pack, which approximates the 1960-64 average of 74,100 tons, is attributed to adverse

weather conditions during the growing season.

Sultana exports during 1965 totaled 73,000 tons, against 73,500 in 1964. As usual, the leading market was the United Kingdom, which took 30,000 tons, compared with 34,800 in 1964. Canada's sultana imports from Australia totaled 18,200 tons in 1965—up 1,400 from those in 1964.

Domestic consumption of sultanas in 1965 was 15,100 tons or approximately the same as the 1964 level of 15,000. However, sultana stocks are reportedly accumulating in both Australia and the United Kingdom.

U.S. Exports of Livestock and Meat Products

U.S. exports of lard over the last 6-8 months have slowed almost to a trickle compared with the average of recent years. U.S. lard continues to be relatively high priced and in short supply because of reduced hog slaughter. In the United Kingdom, the principal export market, there has been considerable substitution of vegetable and marine oils in the manufacture of compound fats and margarine.

Interest in U.S. mohair has revived in the United Kingdom. U.S. prices have been quite low for many months. Exports in 1965 were considerably above those of 1964 but were only about half as large as in the years just prior to 1964.

Exports of cattle hides in January-February 1966 were substantially above those of the camparable 1965 period. World demand for leather products has risen at a time when world supplies have contracted. Argentine hide exports have been extremely low for the past 2 years, forcing Western and Eastern European buyers to seek alternative sources of supply.

U.S. EXPORTS OF LIVESTOCK PRODUCTS
[Product weight basis]

Commodity	February		Jan.-Feb.	
	1965	1966	1965	1966
	1,000 pounds	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
Animal fats:				
Lard	29,862	15,016	52,749	20,681
Tallow & greases:				
Inedible	179,580	154,472	274,56..	300,395
Edible	749	1,848	1,321	4,179
Red meats:				
Beef and veal	5,581	1,654	8,799	6,479
Pork	3,911	3,583	6,183	5,964
Lamb and mutton	95	91	180	149
Sausages:				
Except canned	150	165	277	337
Canned	92	133	178	242
Other canned meats	568	780	1,060	1,305
Meat specialties:				
Frozen	97	221	127	322
Canned	90	118	153	331
Total red meats	10,584	6,745	16,957	15,129
Variety meats	11,241	13,938	15,930	30,606
Sausage casings:				
Hog	360	443	595	1,004
Other natural	183	303	290	676
Mohair	288	950	404	1,505
	1,000 pieces	*1,000 pieces*	*1,000 pieces*	*1,000 pieces*
Hides and skins:				
Cattle	702	1,236	1,489	2,172
Calf	115	259	214	427
Kip	15	36	46	109
Sheep and lamb	168	144	316	364
Horse	1	3	5	5
Goat and kid	7	75	36	81
	Number	*Number*	*Number*	*Number*
Live cattle	4,133	2,547	6,852	4,578

Bureau of the Census.

Grenada's Nutmeg, Mace Exports Up Sharply

Exports of nutmeg and mace from Grenada—the world's second largest producer—totaled over 3 million pounds during the first 11 months of 1965, or nearly triple those of the previous year. The United States accounted for over one-third of the total, with most of the balance going to the common market and the United Kingdom.

Argentina Exports More Tobacco

Argentina's exports of unmanufactured tobacco last year, at 25.8 million pounds, were the second largest on record, exceeded only by the 1963 high of 29.5 million pounds. However, exports during calendar year 1966 will probably be considerably below those of recent years because severe rains have drastically reduced the 1966 harvest. Unofficial trade information indicates the trade has been urging the government to impose quantitative restrictions on exports this year because it believes the final outturn will be insufficient to meet domestic requirements.

France and West Germany were the principal export markets for Argentine leaf tobaccos last year. Shipments to France rose to 18.3 million pounds from 13.7 million in 1964. Exports to West Germany totaled 4.5 million pounds, compared with 3.7 million the previous year. Shipments to Switzerland, Algeria, and Uruguay were also up from 1964, while those to the Netherlands, Belgium, and the United States declined. Also, no exports to Italy were reported last year in contrast to sizable quantities during both 1963 and 1964.

Argentina's tobacco exports consist mainly of the native, dark air-cured kinds shipped principally to France and West Germany. Exports of flue-cured tobaccos last year—mainly to West Germany—totaled 3.5 million pounds, compared with 2.4 million in 1964 and 1.3 million in 1963.

ARGENTINA'S UNMANUFACTURED TOBACCO EXPORTS

Destination	1963	1964	1965[1]
	1,000 pounds	*1,000 pounds*	*1,000 pounds*
France	16,042	13,741	18,261
Germany, West	3,895	3,717	4,487
Netherlands	1,949	1,090	656
Belgium	844	972	653
Algeria	—	332	566
Uruguay	—	134	388
Switzerland	—	204	356
United States	17	492	188
Italy	6,331	2,909	—
Others	395	465	247
Totals	29,473	24,056	25,802

[1]Preliminary; subject to revision.

Spain Increases Its Cigarette Output

Cigarette output by the Spanish Tobacco Monopoly last year set a new record of 33.8 billion pieces—up 20.2 percent from the 28.1 billion produced in 1964. Production of American-blended cigarettes rose to 1,256 million pieces from 1,144 million in 1964 but was still considerably below the 1958 high of 2,630 million.

Cigar output last year totaled 286 million pieces—highest in 30 years. Production of pipe tobacco increased slightly from the previous year, while output of cut tobacco dropped about 12.5 percent.

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Cigarette sales last year approximated 40.5 billion pieces, compared with about 37.1 billion in 1964. Sales of domestic-made cigarettes, at 31.6 billion pieces, were 8 percent above the 1964 figure of 29.3 billion. Sales of domestic-made, American-blended cigarettes dropped to 1,179 million pieces from 1,241 million in 1964. The slight gain shown for "Bisontes" was more than offset by sharp declines for the other American-blended brands.

Sales of imported cigarettes last year totaled an estimated 8.9 billion pieces, compared with 7.8 billion in 1964. Approximately 6.9 billion pieces were from the Canary Islands, compared with about 6.3 billion in the previous year. Sales of imported U.S. brands rose to 1,957 million pieces from 1,464 million in 1964, and those of British-type cigarettes were also up slightly. Sales of Spain's initial imports from West Germany and France totaled about 8 million pieces from each country.

Cigar sales last year totaled 398 million pieces—up 18 percent from 337 million in 1964. Sales of domestic-made cigars rose to 248 million pieces from 207 million the previous year. From 113 million in 1964, sales of cigars from the Canary Islands rose to 129 million, while those of Cuban cigars rose from 17 million to 21 million.

Ecuador Expanding Cigar Wrapper Production

Ecuador has been expanding its production of cigar-type tobaccos—mainly wrapper—for export, mainly to the United States. From an initial 1963 planting of about 80 acres producing about 70,000 pounds, the 1966 crop is forecast at about 680,000 pounds from about 520 acres. The 1965 harvest reportedly totaled 269,000 pounds.

Arrivals of Ecuadoran cigar-type tobaccos in the United States during the last 2 calendar years rose from 91,000 pounds, valued at $233,000, in 1964 to 299,000 pounds, valued at $524,000, in 1965. Arrivals of cigar wrapper amounted to 64,000 pounds, valued at $243,000, in 1965 compared with 51,000 pounds, valued at $204,000, in 1964. The remaining arrivals consisted of unstemmed and stemmed cigar-filler-type tobaccos.

Japan's Tobacco Exports Rise Slightly

Japan's 1965 tobacco exports, at 16.6 million pounds, were 6 percent above the 15.6 million shipped out in 1964. Most were burley and native light air-cured leaf.

Burley exports last year totaled 9.8 million pounds. West Germany took 8.7 million at the equivalent of 52 U.S. cents per pound. Other burley purchasers included Hong Kong, 805,000 pounds and Austria, 267,000.

Exports of native light air-cured tobacco, totaling 4.8 million pounds, went mostly to West Germany, the Ryukyus, and Belgium. Exports of flue-cured, at about 2 million pounds, went entirely to the Ryukyus, with the exception of 4,000 pounds shipped to the United Kingdom.

JAPAN'S EXPORTS OF UNMANUFACTURED TOBACCO

Destination	1963	1964	1965
	1,000 pounds	*1,000 pounds*	*1,000 pounds*
Germany, West	5,689	9,830	10,697
Ryukyu Islands	3,250	3,851	3,708
Hong Kong	267	410	805
Belgium	728	661	564
UAR (Egypt)	1,333	—	269
Austria	—	265	267
Netherlands	346	236	254
United Kingdom	—	—	4
France	—	304	—
Norway	635	40	—
Switzerland	—	40	—
Tunisia	545	—	—
Total	12,793	15,637	16,568

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